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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/586,568	04/25/2007	Lutz Abe	941-012603-US (PAR)	6523

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PERMAN & GREEN
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FAIRFIELD, CT 06824

EXAMINER	
WARREN, DAVID S	
ART UNIT	PAPER NUMBER
2837	
MAIL DATE	DELIVERY MODE
09/03/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/586,568	ABE ET AL.	
	Examiner	Art Unit	
	DAVID S. WARREN	2837	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 July 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-53* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-53* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *18 July 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *7/18/06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 3, 11, 14, 19 – 21, 25, 26, 31, 33, 38, 41, 42, and 51 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Regarding claim 3, it is not understood as to what is meant by “the last event.” Does Applicant mean “latter” or the last event in, say, a MIDI message? Regarding claim 11, the distinction between "one channel" and "one specific channel" is not understood. Regarding claims 14, 19 – 21, 33, and 42, the phrase “and/or” renders the claims indefinite. For the rejection below, the Examiner is interpreting this phrase as "or." Regarding claims 25, 26, 31, 38, 41, and 51 the term “preferably” renders the claims confusing (i.e., a preference may be subjective). Clarification and correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –

> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1 – 13, 15, 16, 20 – 25, 27 – 32, 34, 35, 37, 38, 45 – 51 and 53 are rejected under 35 U.S.C. 102(e) as being anticipated by Brenner et al. (US 2004/0139842). Regarding independent claims 1, 27, 45, and 53, Brenner discloses the use of a processor (302, fig. 3), an electronic memory (322, fig. 3) storing music data with a first message type (i.e., an audio file) and a second type ("commands present in the audio file" - see Abstract), a loudspeaker (330), a plurality of lights (L_1 - L_N; fig. 3), the processor configured by the information in the second type messages to activate the lights based on the information contained in the first type messages (via elements 306 and 324, fig. 3). Regarding claim 2, Brenner's "assign" and "associate" are synonymous with Applicant's mapping (see Abstract; also see paragraph [0006]). Regarding claim 3, see paragraph [0029]). Regarding claims 4, 8, and 28, see paragraph [0020] for lights in different locations. Regarding claims 5 and 29, Brenner shows the use of different colored lights (see paragraph [0027]). Regarding claims 6, 7, 30 and 47, Brenner shows the use of velocity to control light intensity (paragraph [0028] first two sentences). Regarding claims 9, 10, and 31, Brenner discloses the use of light groupings, see paragraphs [0021], [0024], and especially [0031]. Regarding claims 11 and 12, see paragraph [0030] (ignoring ADSR is synonymous with setting velocity to zero for light channels (also, channel data is inherent in MIDI messages, channel assignment may be by default). Regarding claims 13, 32 and 48, all MIDI notes are

defined as a note number (this feature is inherent in all MIDI note-on, note-off data structures). Regarding claims 15, 16, 34, 35 49 and 50, see Brenner's claim 10. Regarding claims 20 – 25, 38 and 51, the use of MIDI (Brenner explicitly states the use of the *MIDI specification* - see paragraph [0009] - that allows programming and editing of any function including channels, patterns, ranges, velocities, etc. (as stated by Brenner, MIDI allows "use of a library of well developed tools and feature definitions which are already available for the development, and editing of MIDI format files" – in other words, within the MIDI specification, as taught by Brenner, the use of editing, etc., is inherent). Regarding claim 46, see paragraph [0029].

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 14, 17 – 19, 26, 33, 36, 39 – 44, and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brenner et al. (2004/0139842). Regarding claims 14 and 33, dividing the note number by an integer or modulo merely associates all pitch classes to a specific light (e.g., all C#'s will light the LED associated with "2" key on the keypad; modulo 13 for the chromatic scale, modulo 8 for the diatonic scale, modulo 6 for the pentatonic scale). One of ordinary skill would think to use this technique so that

a melody, e.g., a ringtone, would light the same pattern of lights regardless of octave and to ensure that all notes are associated with a light on the mobile device, i.e., a typical piano has 88 keys, a typical cell phone has 12. The use of randomizing lights in association with MIDI signals is deemed to be an obvious matter of design choice. The motivation for making this choice would be to avoid repetitive lighting for a ring tone with only a few notes. Official Notice is taken that look-up tables are well-known methods of mapping. Brenner shows the use of vibrations (last sentence paragraph [0021]). Regarding claims 26, 39 and 52, System Exclusive (known as SysEx) data is extremely well known in MIDI protocol, for the purpose of loading, saving, transmitting, etc., proprietary data to any MIDI device (e.g., mixing data to produce various colors, paragraph [0027]). Regarding claims 42 – 44, Official Notice is taken that the use computer terminals to create, emulate, and test is well known.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO form 892, Notice of References cited.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID S. WARREN whose telephone number is (571)272-2076. The examiner can normally be reached on M-F, 9:30 A.M. to 6:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter Benson can be reached on 571-272-2227. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David S. Warren/
Examiner, Art Unit 2837